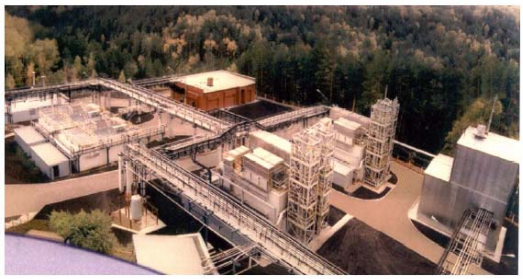
FACT SHEET: Liquid Propellant Disposition Project (KRASNOYARSK, RUSSIA)



U.S.-provided Liquid Propellant Disposition System at Krasnoyarsk, Russia.

Bottom Line: The U.S. has wasted $106 million for a CTR facility that will never be used.

Project Description: Russia requested U.S. assistance to dispose of 30,000 metric tons of liquid fuel (heptyl) and 123,000 metric tons of oxidizer (amyl). Russia needed assistance with the disposal of liquid propellant to facilitate the disposal of intercontinental ballistic missiles and submarine-launched ballistic missiles. The liquid propellant disposition project involves removing the heptyl and amyl from missile sites, transporting the material to storage sites, and converting the material into other chemical products for commercial use.

What the U.S. Has Already Spent: As of July 2, 2002, DOD had obligated at least $164.5 million and disbursed $137.2 million to assist Russia in the disposal of heptyl and amyl, including approximately $106 million to design, build, test, and ultimately close out the contract of the actual conversion facilities. (In part, DOD also provided Russia with 125 flatbed railcars, 670 intermodal tank containers, and seven cranes for the transportation and storage of the liquid propellants.)

- The system is only usable for heptyl conversion.
- There is no salvage contractor interested in re-sale in the West.
- OSD has decided to salvage the steam/hydrogen generators and turn over the facility's remains to the Russian Federation in May or June 2003.
- The U.S. can hope to recoup only about $1.2 million from the plant, according to OSD.

Why the Project is Stalled: Russia informed DOD in February 2002 that it had used the heptyl and amyl for its commercial space launch program. According to OSD, Russia's Ministry of Defense turned the fuel over to Russia's space agencies.

U.S. Oversight: American contractors worked on the site, but there was no constant U.S. government oversight, and DOD never confirmed that the heptyl and amyl liquids would be available when the facilities were ready. Instead, the U.S. relied on a "good faith" agreement with Russia that the conversion facilities would be used for their intended purpose. Russia has used the same heptyl for its space launch vehicles since 1961. However, DOD says it assumed Russia would not use the heptyl for space launches because the fuel, which had sat in missiles for some time, was too unreliable (i.e. the cost of insurance would be prohibitive). Without telling DOD, Russia reprocessed the fuel in former heptyl-production plants, making it safer for use in space launches.

FACT SHEET: Solid Rocket Motor Disposition Facility (VOTKINSK, RUSSIA)

Solid Propellant Disposition Facility (artist's conception)

Bottom Line: The U.S. has wasted $95 million on a CTR facility that will never be built.

Project Description: Construct a low-pressure, contained burn system to remove the solid propellant from Russian SS-24, SS-25 and SS-N-20 missile motors in an environmentally sound manner. The facility would only process missiles already de-mated from their warheads.

What the U.S. Has Already Spent: The U.S. has issued stop-work orders on the project but has already disbursed:

$80.0 million – design and testing for a facility to burn rocket engines indoors
$14.6 million – site improvements, including a road, gas line, warehouse, and tree clearing
$94.6 million total (plus approximately $1 million more to finish the design)

- There are no alternate uses or customers for the $80 million design.
- There is no apparent alternate use for the improved site in Votkinsk.

Additional funds the U.S. Would Have Spent at Votkinsk if Completed: At least $120 million to construct the facility, plus about $20 thousand per missile (over 300 missiles total).

Why the Project is Stalled: According to DOD, the project was halted by local environmental politics in Votkinsk, a city of 100,000 less than 10 miles from the proposed disposition site. OSD has been advised by Moscow that the Votkinsk site will not likely be available because of an inability to obtain necessary land permits. OSD, which maintains that the facility would pose a negligible air quality threat to the surrounding area, initially chose a closed-burn approach because of the expected environmental benefits. (The land use issue did not surface earlier because DOD finalized the deal without first obtaining necessary land permits.)

Alternate Solution: DOD is exploring an option to refurbish old open-burn facilities, a project that would also require refurbishing rail lines and building storage facilities for transitory missiles. This approach would cost $25.9 million in FY 2004, an additional $84 million over the life of the program: $10 – 15 million for facility/rail refurbishment; $15 million for storage facility prep; and some $54 million for enough storage facilities to house 18 SS-24s and 36 SS-25s awaiting dismantlement. DOD says it will not make a final decision on whether to fund the alternate plan until Russia gives it a more forward-looking ICBM drawdown schedule (it has received this timetable).

Future Land Permits: The old burners are immobile and there would be no guarantee that the land permits for outdoor burning would not get yanked at some point during the process.